

Title (en)  
BATTERY CARD ASSEMBLY FOR ELECTRICAL APPARATUSES

Title (de)  
BATTERIEKARTEN-ANORDNUNG FÜR ELEKTROGERÄTE

Title (fr)  
ASSEMBLAGE À CARTES DE BATTERIE POUR APPAREILS ÉLECTRIQUES

Publication  
**EP 1116284 B1 20071003 (EN)**

Application  
**EP 99943617 A 19990723**

Priority  
US 9916657 W 19990723

Abstract (en)  
[origin: WO0106580A1] A battery power supply system consisting of battery card, battery card assembly where battery card slots in, and charger where battery card gets recharged is disclosed. The standardized battery card is designed in light, thin, safe, and user-friendly card configuration to make interchangeability between appliances easy and possible. In addition, outside the battery card there is an injection mechanism that fits the battery card in the battery card assembly when slot-in and inject-out, and inside the battery card there is a built-in fuel gauge circuit that regulates voltage with an LED indicator. The battery card assembly is designed either for single or multiple battery cards. In the case of using single battery card, the battery card assembly connects to a power buffer in the electrical apparatus so the user can change their battery card without turning off the electrical apparatus within a certain time interval. In the case of multiple battery cards, the battery card assembly connects power to the electrical apparatus from only one of the battery cards. Until the first battery card is completely discharged, the battery card assembly automatically switches to another battery card without disturbing the electrical apparatus operation.

IPC 8 full level  
**H01M 10/04** (2006.01); **H01M 50/209** (2021.01); **H01M 50/211** (2021.01); **H01M 50/213** (2021.01); **H01M 50/224** (2021.01); **H01M 50/227** (2021.01); **H01M 50/229** (2021.01); **H01M 50/233** (2021.01); **H01M 50/244** (2021.01); **H01M 50/247** (2021.01); **H01M 50/296** (2021.01); **H01M 6/18** (2006.01); **H01M 6/42** (2006.01); **H01M 6/50** (2006.01); **H01M 10/0525** (2010.01); **H01M 10/42** (2006.01); **H01M 10/46** (2006.01)

CPC (source: EP US)  
**H01M 6/5011** (2013.01 - EP); **H01M 10/0436** (2013.01 - EP); **H01M 10/4257** (2013.01 - EP); **H01M 50/211** (2021.01 - EP US); **H01M 50/213** (2021.01 - EP US); **H01M 50/224** (2021.01 - EP US); **H01M 50/227** (2021.01 - EP US); **H01M 50/229** (2021.01 - EP US); **H01M 50/233** (2021.01 - EP US); **H01M 50/244** (2021.01 - EP US); **H01M 50/247** (2021.01 - EP US); **H01M 50/296** (2021.01 - EP US); **H01M 6/181** (2013.01 - EP); **H01M 6/42** (2013.01 - EP); **H01M 10/0525** (2013.01 - EP); **H01M 10/46** (2013.01 - EP); **Y02E 60/10** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP)

Cited by  
TWI407617B; TWI407618B; TWI398979B; TWI399880B

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Designated extension state (EPC)  
AL LT LV MK RO SI

DOCDB simple family (publication)  
**WO 0106580 A1 20010125**; AT E375010 T1 20071015; AU 5667799 A 20010205; DE 69937245 D1 20071115; DE 69937245 T2 20080626; EP 1116284 A1 20010718; EP 1116284 A4 20040811; EP 1116284 B1 20071003

DOCDB simple family (application)  
**US 9916657 W 19990723**; AT 99943617 T 19990723; AU 5667799 A 19990723; DE 69937245 T 19990723; EP 99943617 A 19990723